LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES

OFFICE OF FISHERIES
INLAND FISHERIES SECTION

PART VI -A

WATERBODY MANAGEMENT PLAN SERIES

BLIND RIVER

HISTORY & MANAGEMENT ISSUES

CHRONOLOGY

December 2012 - Prepared by
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HISTORY

GENERAL INFORMATION

Description

Blind River is a tributary of Lake Maurepas in the Lake Pontchartrain Basin. The head waters begin approximately 2.5 miles north of Convent Louisiana, 4.5 miles off the eastern levee of the Mississippi River. It flows northeast from St. James Parish through both Ascension and St. John the Baptist Parishes before discharging into Lake Maurepas. Blind River has numerous tributaries consisting mostly of pipeline canals and bayous. The majority of the watershed consists of Maurepas Swamp and surrounding developed land and agriculture.

River stage

Currently, there is no gauge station in Blind River. The nearest gauge is Amite River at French Settlement approximately 10 river miles northwest of where the Amite Diversion Canal converges with Blind River

(http://water.weather.gov/ahps2/hydrograph.php?wfo=lix&gage=fsll1&view=1,1,1,1,1,1,1,1&toggles=10,7,8,2,9,15,6&type=0).

Flood stage at French Settlement is at 4 feet.

Parishes located

St. James, Ascension, St. John the Baptist and Livingston Parishes (APPENDIX I – MAP AND PARISHES).

Border waters

Lake Maurepas
Amite River
Mississippi River (historically)

ACCESS

Boat docks

St. James boat launches (APPENDIX II – MAP AND LANDING)

Piers

St. James Boat launch

State/Federal facilities

None

PHYSICAL DESCRIPTION

Shoreline length

46 miles (both shorelines of 23 river miles)

Timber type

Bald cypress (*Taxodium distichum*) and tupelo gum (*Nyssa aquatica*)

Average depth

12 feet

Water fluctuation

Amite River at French Settlement had a historic high crest of 7.4 feet and a historic low of 0.21 feet. High water periods are typical for late spring/early summer. High water is also influenced by local tropical storm events. Extremely low water (less than 1.0 feet at Amite River at French Settlement) is rare and only occurs during extreme drought.

Shoreline development

Less than 5% of the shoreline is developed by landowners. Most developments are camps that are only accessible by boat.

EVENTS / PROBLEMS

- Levees disconnect Blind River and surrounding swamps from the Mississippi River. The lack of fresh river water has led to deterioration of Maurepas Swamp and Blind River water quality. The lack of river water has also resulted in the occasional backflow of water from Lake Maurepas.
- The railroad and Highway US 61 act as dams to the transfer of water through the swamp system.

MANAGEMENT ISSUES

AQUATIC VEGETATION

Nuisance species

Historically – duckweed (*Lemna minor*) in the 1970's.

Common salvinia (*Salvinia minima*)
There are about 300 acres that that are restocked from draining backwater areas.

Water hyacinth (*Eichhornia crassipes*)

There are about 50 acres scattered throughout the basin.

Lilies (*Nymphaea spp*.)
There are fringes along most of the shoreline of the main river.

Control Measures

Biological Control

Approximately 500 adult Florida salvinia weevils were stocked in 2008 and will continue to be stocked as they become available. Samples of common salvinia were taken in the fall of 2009 yielding no weevils. This was likely due to the flushing out of plant material following Hurricane Gustav.

Chemical Control

Continuous application of foliar herbicides.

Table 1. Foliar herbicide treatments on Blind River, LA from 2005 – 2011.

BLIND RIVER ARCRES AQUATIC VEGETATION TREATMENT BY YEAR							
PLANT	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Alligatorweed	5	111	358	45	-	25	82
Duckweed	-	-	-	-	15	207	84
Pennywort	-	158	113	3	17	3	18
Primrose	-	24	86	71	-	3	9
Common salvinia	7	230	286	616	820	444	862
Water hyacinth	78	302	334	149	48	86	29
Water Paspalum	11	1	10	-	23	135	72
Other	-	42	29	14	1	-	29
TOTAL:	101	868	1,216	898	923	903	1,185

Limitations

During high water periods, common salvinia floods into swamps where it flourishes. Spray crews are unable to access these areas due to the stands of dense timber and shallow water. This ensures an annual re-infestation of common salvinia.

HISTORY OF REGULATIONS

Standardized Regulations

Statewide standard commercial and recreational regulations apply.
http://www.wlf.louisiana.gov/regulations

FISH KILLS / DISEASE HISTORY

- July 29, 1991 – Unknown cause
- August 1992 – Hurricane Andrew
- May 24, 1996 – A pipeline failure resulted in the spill of 8,700 barrels of unleaded gasoline. The impact area was approximately two miles of right-of-way and tributaries between Hwy 61 to the KCS railroad tracks. A preliminary list of species included gar, bowfin, gizzard shad, freshwater drum, and sunfishes.
- August 2005 – Hurricane Katrina
- September 2008 – Hurricane Gustav
- August 2012 – Hurricane Isaac

CONTAMINANTS / POLLUTION

Water quality

In 2006, the EPA listed Blind River as an impaired river due to organic enrichment/depletion of oxygen, mercury, nitrates, sedimentation/siltation, total phosphorus, and turbidity. There were no potential sources reported and achievement of the total maximum daily loads was anticipated by 2011.

http://ofmpub.epa.gov/tmdl_waters10/attains_watershed.control?p_huc=08070204&p_cycle=&p_report_type=T

Fish consumption advisory

A consumption advisory was issued April 23, 1998 after an unacceptable level of mercury was detected in bowfin. Women of child bearing age and children under the age of seven should limit bowfin consumption to no more than one meal per month. Other adults and children over the age of seven should limit bowfin consumption to no more than four meals a month. This advisory was last reviewed December 4, 2003.

http://www.deq.louisiana.gov/portal/PROGRAMS/MercuryInitiative/FishConsumptionandSwimmingAdvisories.aspx

BIOLOGICAL

Fish sampling

To monitor the sport fishery of Blind River, LDWF initiated standardized sampling in 1996 (Table 1).

Table 2. Historical and proposed sampling efforts on Blind River, LA from 1996 – 2015.

BLIND RIVER SAMPLING	
1996	Electrofishing – 2 stations (spring and fall)
1997	Electrofishing – 3 stations (spring) Electrofishing – 4 stations (fall)
2006	Electrofishing – 4 stations (spring and fall)
2007	Electrofishing – 4 stations (spring and fall)
2008	Electrofishing – 4 stations (spring and fall)
2009	Electrofishing – 4 stations (spring and fall)
2010	Electrofishing – 4 stations (spring and fall)
2012	Electrofishing – 4 stations (spring and fall) Hoop nets – 3 sites
2013*	Electrofishing – 4 stations (spring and fall)
2014*	Electrofishing – 4 stations (spring and fall)
2015*	Electrofishing – 4 stations (spring and fall) Hoop nets – 3 sites

*NOTE: Years of post-hurricane electrofishing sampling efforts to measure natural recovery of fishery.

Stocking History

Initial stocking efforts were a response to major fish kills caused by Hurricane Andrew. Subsequent stockings were the result of Hurricanes Katrina and Gustav. Blind River has been stocked with 152,704 Florida strain largemouth bass since 1984 (Table 2).

Table 3. Stocking history of Blind River, LA from 1993 – 2009.

YEAR	CHANNEL CATFISH	LARGEMOUTH BASS	FLORIDA BASS	BLACK CRAPPIE	BLUEGILL
1993	3,600	64,273			
1994	1,800	99			
1995			27,000		
1996			27,032		
1997			9,800		
1999			12,043		
2000			14,244		
2001			10,000		
2002			10,546		
2003			10,036		
2004			10,013		
2005			6,972		
2006			75,248		89,661
2007	75,169		73,743		60,545
2008	9,168		76,901	1,500	
2009	30,884		75,862		200,976
2010	3,366				
2011			3,350		

Species profile

A list of species collected or known from Blind River is found in Table 4 below:

Table 4. Family, Scientific and Common Names of fish species collected or known from the Blind River watershed.

Achiridae – American soles
Trinectes maculates – Northern hogchoker
Amiidae – bowfin
Amia calva – bowfin
Aphredoderidae – trout perches
Aphredoderus sayanus – pirate perch
Anguillidae – freshwater eels
Anguilla rostrata – American eel

Atherinopsidae - New World silversides
Labidesthes sicculus-Brook silverside
Menidia beryllina-Inland silverside
Catostomidae – suckers
Ictiobus cyprinellus – bigmouth buffalo
Centrarchidae - sunfishes
Lepomis cyanellus - green sunfish
Lepomis humilis - orangespotted sunfish
Lepomis megalotis - longear sunfish
Lepomis gulosus – warmouth
Lepomis macrochirus – bluegill
Lepomis marginatus—dollar sunfish
Lepomis microlophus - redear sunfish
Micropterus punctulatus – spotted bass
Micropterus salmoides –northern largemouth bass
Micropterus floridanus – Florida bass
Pomoxis annularis – white crappie
Pomoxis nigromaculatus – black crappie
Clupeidae - herrings
Alosa chrysochloris – skipjack herring
Brevoortia patronus – Gulf menhaden
Dorosoma cepedianum - gizzard shad
Dorosoma petenense – threadfin shad
Cyprinidae - carps and minnows
Cyprinus carpio – common carp
Cyprinella venusta – blacktail shiner
Notemigonus crysoleucas – golden shiner
Opsopoeodus emiliae – pugnose minnow
Pimephales promelas – fathead minnow
Elopidae – tarpons
Elops saurus – ladyfish
Engraulidae – anchovies
Anchoa mitchilli – bay anchovy
Fundulidae – topminnows and killifishes
Fundulus chrysotus – golden topminnow
Ictaluridae - North American catfishes
Ameiurus melas - black bullhead
Ameiurus natalis – yellow bullhead
Ictalurus furcatus - blue catfish
Ictalurus punctatus - channel catfish
Pylodictis olivaris - flathead catfish
Lepisosteidae - gars
Atractosteus spatula – alligator gar
Lepisosteus oculatus – spotted gar
Lepisosteus osseus – longnose gar
Moronidae – temperate basses

Morone mississippiensis – yellow bass
Mugilidae – mullets
Mugil cephalus – striped mullet
Paralichthyidae – flounders
Paralichthys lethostigma – southern flounder
Poeciliidae - livebearers
Gambusia affinis - western mosquitofish
Poecilia latipinna - sailfin molly
Sciaenidae – drums
Aplodinotus grunniens – freshwater drum
Micropogonias undulates – Atlantic croaker

Largemouth bass genetics

Over 435,000 Florida largemouth bass have been stocked regularly into Blind River since 1995. A majority of these fish were stocked post Hurricanes Katrina and Gustav in response to massive fish kills. As shown in Table 3, genetic testing of 206 largemouth bass in 2010 showed that less than 7% of the fish sampled were carriers of the Florida allele.

Table 4. Results of 2010 genetic testing for the Florida gene on Blind River, Louisiana.

Number of fish	% Northern	% Hybrid	% Florida
206	93.7	5.8	0.5

Threatened/endangered/exotic species

The pallid sturgeon (*Scaphirhynchus albus*) inhabits the reach of the Mississippi River adjacent where it used to connect to Blind River. Paddlefish (*Polyodon spathula*) and Gulf sturgeon (*Acipenser oxyrinchus desotoi*) are inhabitants of the Lake Pontchartrain Basin.

It is possible that Asian carp (*Hypophthalmichthys molitrix* and *H. nobilis*) have entered the system via the Bonnet Carre Floodway post 2011 Mississippi River flood event. No reports have been verified at this time.

ANGLER SURVEYS

No angler surveys conducted

HYDROLOGICAL CHANGES

- Mississippi River levee resulted in the lack of fresh river water entering the system.
- Construction of Highway 61 and railroad have impeded water flow through adjacent swamp

WATER USE

Hunting

Yes. Maurepas Swamp Wildlife Management area encompasses more than half of Blind River and its tributaries (APPENDIX III – MAP AND WMA).

Skiing

Yes

Scuba Diving

No

Swimming

Yes

Irrigation

No

Fishing

Yes

Boating

Yes

APPENDIX I – MAP AND PARISHES

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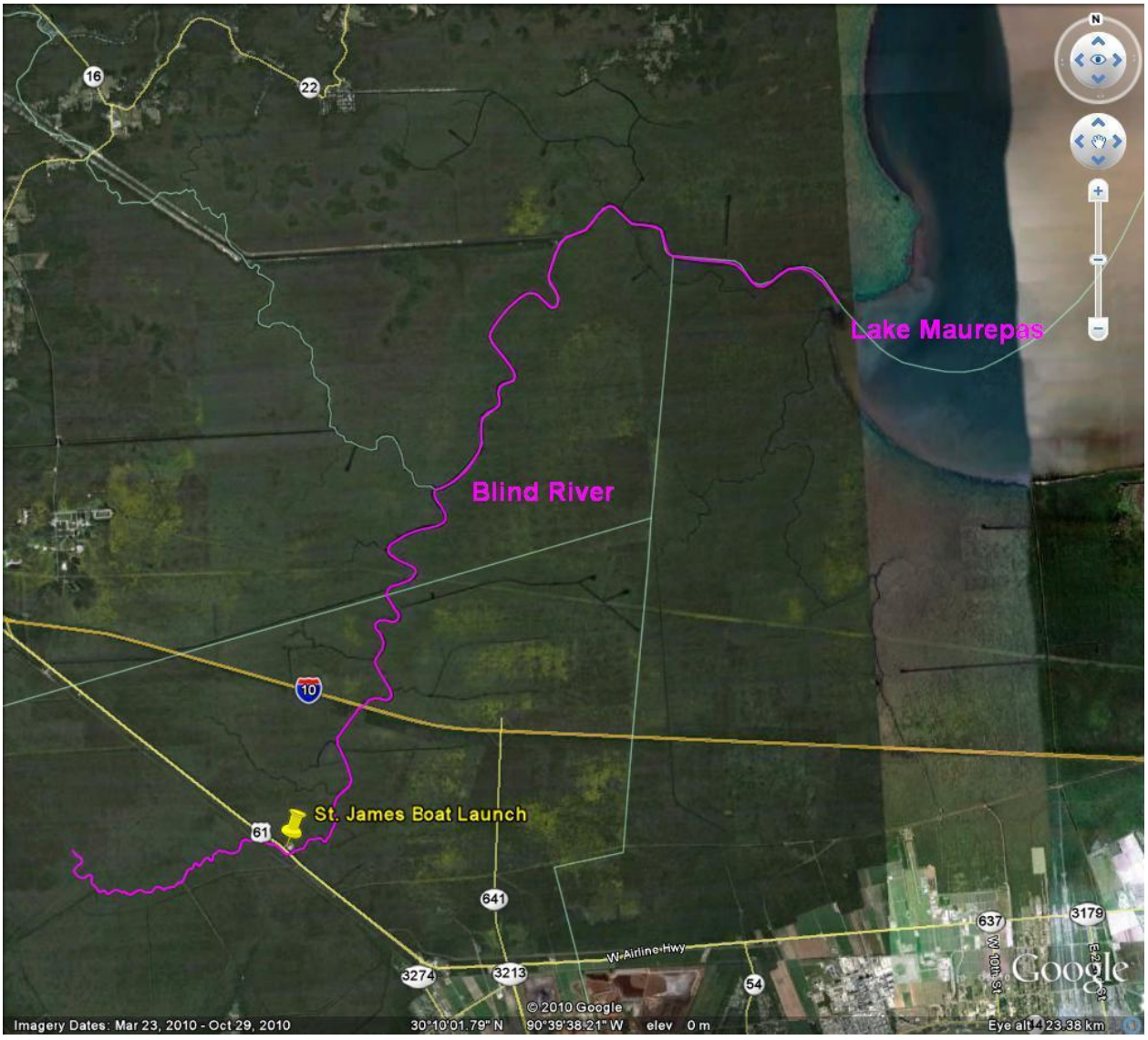
APPENDIX II – MAP AND LANDING

(return to boat docks)



APPENDIX III – MAP AND WMA

(Return to Hunting)